

Marine Corps Combat Development Command Quantico

Quantico, Virginia

Superfund Program Site Fact Sheet

Type of Facility: Marine Corps Federal Facility

Contaminants: Department of Defense
Defense State Memorandum of Agreement

Funding: Navy

Site Description and History

The Marine Corps Combat Development Command (MCCDC) is a 56,000-acre military training facility located in Quantico, Virginia, 35 miles south of Washington, D.C. Portions of MCCDC are located in southern Prince William County, northern Stafford County, and eastern Fauquier County. MCCDC is bordered by Prince William Forest Park to the north and the Potomac River to the east. Residential areas are on base and to the north, south, and west of the base.

Operations at MCCDC began in 1917 when the Department of Defense leased 5,300 acres of land next to the Potomac River near Quantico in order to establish a new marine training camp. In April 1943, 50,985 acres of land was obtained to accommodate increased training activities.

The mission of the installation is to: 1) develop and implement doctrines for all Marine Corps mission areas; 2) develop and implement policies and programs for the training and education of officers, enlisted and reserve Marine Corps personnel; and 3) provide support for Combat Development Command Forces and Headquarters activities.

MCCDC was listed on the National Priorities List (NPL) on June 30, 1994. The current NPL Areas of Concern (AOCs) are described below.

Current Site Status

There are currently five Remedial Investigation (RI) Sites at MCCDC-Quantico:

Arsenic Burial Area (ABA): Several locations have been investigated under the Installation Restoration Program (IRP) to find the Arsenic Burial Area (ABA). In 1997, an area containing two drums of sodium arsenite and other surface debris was located. The area was further investigated in 1998 and determined not to contain buried drums. Soil samples from the 1998 investigation did not show contaminant levels above

background levels. While the suspected ABA RI was completed in 1998, information acquired in early 1999 indicated the actual ABA might not have been located. A NFA ROD was signed in 2001.

Former Rifle Range: The Former Rifle Range (FRR) originally consisted of a group of skeet, rifle, and pistol ranges. However, subsequent investigations under the IRP extended this AOC's boundaries to encompass an area of former training ranges, approximately one million square meters in size. An EE/CA is currently being worked on to remove hot spots.

The AOC has been impacted by lead and copper from the ranges. In 1994, an Interim Remedial Action (IRA), consisting of fencing, public education efforts and storm water runoff controls was implemented for the original portion of the AOC. The FRR RI was completed in 1999.

Old Batch Plant: The Old Batch Plant (OBP) was used to store transformers in the 1970s. IRP sampling determined soil at the OBP contained elevated levels of PCBs. In 1990, an IRA was performed to excavate PCB contaminated soil. RI sampling found PCBs and other contaminants in the sediments of the unnamed creek that drains the OBP area. The OBP RI was completed in 1998 and the No Further Action Record of Decision was signed in 2000.

Old Landfill: The Old Landfill (OLF) operated from the 1920s to 1971 on the shore of the Potomac River. Operations at the OLF extended the shoreline 600 feet into the Potomac River. Waste Disposal included municipal refuse, construction debris, paints and thinners, transformers, PCB-contaminated dielectric fluids, waste oils, batteries, compressors, and other hazardous materials. In 1990, an IRA was performed to excavate PCB-contaminated soils. In 1993, the VDEQ issued a Notice of Violation (NOV) for the discharge of PCBs and other contaminants from the OLF violating State Water Quality Standards.

In response to the NOV, the facility implemented additional remedial actions to prevent contaminated storm water runoff from discharging to the Potomac River. In 1995, U.S. Fish and Wildlife Service studies found sediments and biota in the Potomac River near the OLF contained PCB and pesticide contamination at or above levels of concern for the protection of human health. In 1995, at the recommendation of the Agency for Toxic Substances and Disease Registry (ATSDR), MCCDC-Quantico established a fish consumption advisory for carp and catfish caught near the OLF. In 1996, additional IRAs were initiated to remove PCB-contaminated soils and sediment, stabilize slopes, and cover the OLF. The OLF RI was completed in early 2000.

Pesticide Burial Area: The Pesticide Burial Area (PBA) was used for a one-time disposal of waste pesticides in 1974. IRP sampling determined soils and groundwater at the PBA contained elevated levels of pesticides. In 1993, an IRA was conducted to remove contaminated soil and the buried pesticides. The PBA RI was completed in 1998 and a No Further Action Record of Decision was signed in 2000.

Site Screening Areas

There are currently ten Site Screening Areas (SSAs) at MCCDC-Quantico. SSAs are areas where there is sufficient information to confirm an AOC, but insufficient information to determine the contaminant characteristics of the area. SSA characterization efforts approximate CERCLA Site Investigation levels of investigation.

The results of the characterization are used to determine if a SSA will ultimately become a RI site or require no further action. The MCCDC-Quantico Site Management Plan calls for the investigation of five SSAs per year. Over 30 SSP's have been completed in 2002.

Desk Top Audit with Sampling Sites

There are currently 78 Desk Top Audit with Sampling (DTAWS) sites at MCCDC-Quantico. DTAWS sites are areas where current information suggests the area could be an area of concern, but contains too much uncertainty to qualify it as a SSA. DTAWS site characterization efforts approximate CERCLA Preliminary Assessment levels of investigation. The results of the DTAWS characterizations are used to determine if a DTAWS site requires further investigation as a SSA, a RI site, or requires no further action. Investigation was completed on all sites in 2002. Nine sites were recommended for further action/investigation.

Desk-top Audit Areas of Concern

There are currently 111 Desk Top Audit (DTA) AOCs at MCCDC-Quantico. DTA AOCs are areas where current information suggests the area had ground-disturbing or other activities that may or may not be of concern. DTA AOC evaluation efforts focus primarily on archival research and personnel interviews. The results of the DTA evaluation efforts are used to determine if a DTA AOC requires further investigation, as a SSA or RI site, or if it requires no further action. Seventy DTAs were closed out in 2002.

Miscellaneous AOCs

Brown Field: A release of JP-4 fuel from the Brown Field underground storage tanks was investigated and remediated under the VDEQ Underground Storage Tank Program.

Aero Club: A release of waste oil from an above ground storage tank was investigated under the Installation Restoration Program and is currently being remediated under the VDEQ Underground Storage Tank program.

Fire Training Area: A release of metal-contaminated petroleum products from the unlined burn pit was investigated under the Installation Restoration Program and is currently being remediated under the VDEQ Underground Storage Tank program.

Russell Road Landfill: The Russell Road Landfill was closed under a Federal Facilities Compliance Agreement with the VDEQ in 1997. Post closure care activities and long term monitoring are currently ongoing.

Community Relations

In March 1995, MCCDC-Quantico completed the Community Relations Plan. In 1996, MCCDC-Quantico surveyed the base and surrounding community for interest in establishing a Restoration Advisory Board. Due to lack of interest, MCCDC-Quantico decided to continue using the existing Technical Review Committee (TRC) as a platform for its community relation efforts. In 1998, MCCDC-Quantico held a TRC meeting. The TRC meeting was opened to the public to keep them updated with the Environmental Restoration Activities of the facility. The VDEQ project manager participates in the TRC and other facility-related public meetings and site visits.

VDEQ Representative	Information Repository
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